Abstract ID : 824

Title : Photo-Identification of Atlantic Spotted Dolphins in the Eastern Gulf of Mexico

Category : Behavior

Student : Not Applicable

Preferred Format : Either Oral or Poster Presentation

Abstract : Photo-identification of dolphins is a frequently utilized method in bottlenose dolphin (Tursiops truncatus) research. Generally, this technique focuses on nicks, notches, and other damage to dorsal fins. Similar photo-identification techniques have been applied to Atlantic spotted dolphins (Stenella frontalis) in Bahamian waters, using underwater and surface photography of dorsal fins and identification of unique color phases or spotting patterns. We have established a photographic catalog of Atlantic spotted dolphins on the continental shelf in the eastern Gulf of Mexico to improve the understanding of Atlantic spotted dolphin movement patterns. During 1998-2003, 35 mm, video and digital photographs were collected in association with line-transect surveys 30-200 km offshore for abundance and distribution of Atlantic spotted dolphins on the continental shelf (24 to 29 degrees N Lat., 81 to 86 degrees W Lon.). We identified Atlantic spotted dolphins using two methods (including quality scoring): 1) dorsal fin marks, and 2) identification of unique spotting patterns. Approximately 200 Atlantic spotted dolphin individuals were photo-identified, with 18 re-sightings of individuals (3 individuals were sighted more than once). These data suggest seasonal movement from inshore during cooler months (Nov-May) to offshore during warmer months (Jun-Oct). Our work represents the first time Atlantic spotted dolphins have been re-identified in the eastern Gulf of Mexico from above the water surface, using spotting patterns and dorsal fin photo-identification. Continued development of the Gulf of Mexico Atlantic spotted dolphin catalog, and comparisons with other spotted dolphin populations, may provide insight into life history and site fidelity of this species.